

Work Order ID 83886

83886

Page 1

Thursday, April 26, 2012 3:12:32 PM

Item ID: D4281-3 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Spacer
 Start Date: 4/26/2012 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 5/10/2012 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: mf Date: 12-04-26 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4281	B

100		0.00							
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100 FLOW WATER JET

Waterjet Memo 0.00

FLOW CNC Waterjet 1-Cut as per Dwg

6061 .750x2. Dwg Rev: B

Prog Rev: B

2-Deburr if necessary

3-OPEN HOLES ON DRILL PRESS AS PER DWG

110		0.00							
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110 QC2- Inspect parts off machine FAI/FAIB

QC Memo 0.00

Quality Control

12 JM/SJ
12-4-28

12 JM/SJ
12-4-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Mill Conv Conventional Milling Machine	Manufacture as per dwg Memo 1- Face to size as per dwg 2- deburr	0.00 0.00		12-05-02		11	c		PTO →
140 *140* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		8-17-02		(11)	(11)		
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				(11)	12-52		

Dart Aerospace Ltd

W/O: 83886		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4281-3 PAR #: Fault Category: Small Fab/water jet NCR: (Yes) No DQA: AK Date: 12/03/14
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: CK Date: 12/5/15

NCR: 12-1414		WORK ORDER NON-CONFORMANCE (NCR) 21.61						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12-5-02	130	piece is under size Due to movement in vise R.C piece is cut on Angle During water jet	S 12/05/02 ASL042	Scrap + Destroy 12 Repair Q481	12-05/02 S 12/05/02	S 12/05/02 ASL042	S 12/05/02	S 12/05/02
		Root Cause: IMPROPER CLAMPING DUE TO GEOMETRY OF PART						

NOTE: Date & initial all entries

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Thursday, April 26, 2012 3:12:32 PM

Item ID: D4281-3 Accept *N9000040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Spacer
Start Date: 4/26/2012 Start Qty: 12.00 *12* Cust Item ID:
Required Date: 5/10/2012 Req'd Qty: 12.00 *12* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo POWDER COAT: 2:10 Start Time: 2:10 Oven Temperature: 320°F Finish Time: 2:40	0.00 0.00				11X	✓		M-L 12/05/03
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				11x	d		JH 12/05/02
180 *180* Packaging Packaging	Identify as per dwg & Stock Location: 1394 Memo	0.00 0.00				112			12/5/02

M 121134

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

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Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/26/2012 **Start Qty:** 12.00 ***12***

Cust Item ID:

Required Date: 5/10/2012 **Req'd Qty:** 12.00 ***12***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Operation Description

Set Up/ Run Hours

Tool ID

Tool

**Plan
Code**

**Accept
Qty**

Reject
QtyReject
Number

**Insp.
Stamp**

190

QC21- Final Inspection - Work Order Release

0.00

190

Memo

0.00

QC

Quality Control

12/5/79

R12-054

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Picklist Print

Thursday, April 26, 2012 3:12:31 PM

Page 1

Work Order ID: 83886

Parent Item: D4281-3

Parent Item Name: Spacer

Start Date: 4/26/2012

Required Date: 5/10/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A NEW ISSUE 11-07-11 JLM VERIFIED BY:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.750X02.000		Purchased	No				f	11.4990		2.0968421			
6061-T6 Bar .750 x 2.00													

Location

Loc Qty

Loc Code

MAT002

11.499

100742

2.271

111448

6.219

119653

3.009

119653

2.1

JM/JN
12-4-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	83886
Description: Spacer		Part Number:	D4281-3
Inspection Dwg: D4281	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	0.133	✓		vern	HB-02
Ø0.250	+0.005/-0.001	0.254	✓		vern	HB-02
0.88	+/-0.030	0.889	✓		vern	HB-02
0.063	+/-0.010	0.063	✓		vern	HB-02
0.440	+/-0.010	0.445	✓		vern	HB-02
0.760	+/-0.010	0.763	✓		vern	HB-02
0.500	+/-0.010	0.494	✓		vern	HB-02
0.900	+/-0.010	0.901	✓		vern	HB-02
0.88	+/-0.030	0.888	✓		vern	HB-02
1.13	+/-0.030	1.128	✓		vern	HB-02
1.65	+/-0.030	1.656	✓		vern	HB-02
0.125	+/-0.010	0.127	✓		vern	HB-02
0.89	+/-0.030	0.893	✓		vern	HB-02
2.00	+/-0.030	2.005	✓		vern	HB-02
0.735	+/-0.010	0.745	✓		vern	HB-02
.735	±.010	.736	—		RA26	vern

Measured by: Jm / PJ	Audited by: S	Preliminary Approval:										
Date: 12-4-28	Date: 17/6/02	Date:										
<table border="1"> <tr> <th>Rev</th> <th>Date</th> <th>Change</th> </tr> <tr> <td>A</td> <td>11.08.22</td> <td>New Issue</td> </tr> </table>		Rev	Date	Change	A	11.08.22	New Issue	<table border="1"> <tr> <th>Revised by</th> <th>Approved</th> </tr> <tr> <td>KJ</td> <td>M</td> </tr> </table>	Revised by	Approved	KJ	M
Rev	Date	Change										
A	11.08.22	New Issue										
Revised by	Approved											
KJ	M											

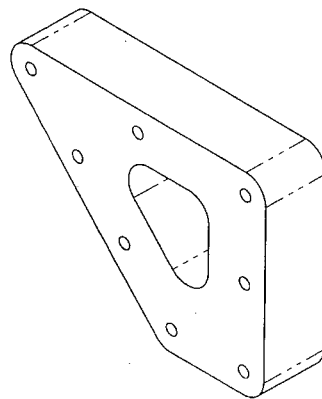
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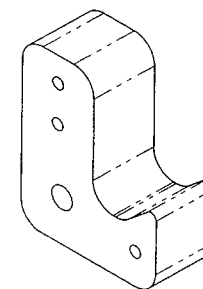
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D4281-1 SPACER







D4281-3 SPACER 

RELEASED
2011-07-28
AM

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT -1: 0.34 lbs
-3: 0.15 lbs

B	ADDED SHT 2 ADDED -3	AJS	11.07.04
A	NEW ISSUE	SC	10.11.25
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4281	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SPACER	NTS
DATE	11.07.04	COPYRIGHT © 2010 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

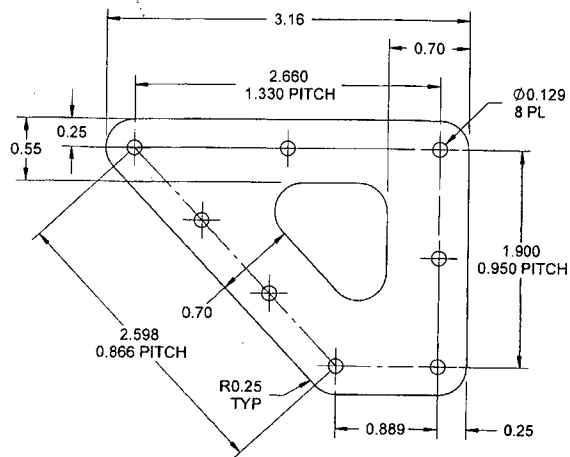
Dart Aerospace Ltd

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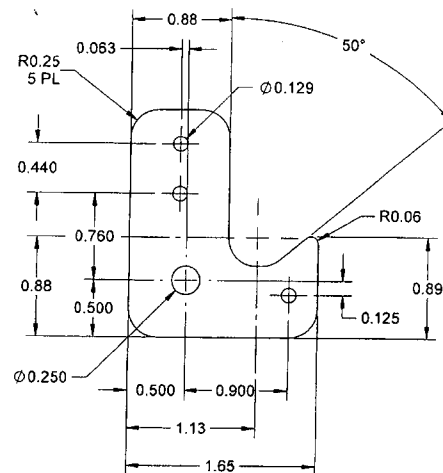
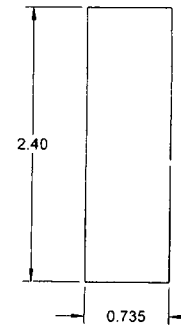
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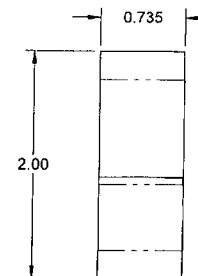
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D4281-1 SPACER



D4281-3 SPACER



DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4281	REV. B
MFG. APPR.	<i>[Signature]</i>	SHEET 2 OF 2	
APPROVED	<i>[Signature]</i>	TITLE SPACER	SCALE
DE APPR.	<i>[Signature]</i>	NTS	
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RELEASED
2011-07-28
[Handwritten initials]

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